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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,315	09/25/2003	Keiji Kato	1247-0515P	4142
2292	7590	03/02/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			GLEITZ, RYAN M	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,315

Applicant(s)

KATO ET AL.

Examiner

Ryan Gleitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/25/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneshige (US 4,912,509).

Kaneshige discloses an image forming apparatus including an image forming apparatus main body (1); image forming unit (8) is a process frame body including at least a photoconductive body (1), image forming means as the light from transmitter (4) for forming an electrostatic latent image on a surface of the photoconductive body (2), and a frame main body. Development device (5) must include at least development means for developing the electrostatic latent image using toner, toner supply means for feeding toner to the development means, and a development device main body for holding the development means and the toner supply means.

A mechanism is provided which permits the image forming unit and developing unit to be mounted on or dismounted from the image forming apparatus in the proper order (abstract, lines 3-8), which reads on the process frame body (8) and the development device (5) being attachable to and detachable from the image forming apparatus main body (1) in a predetermined

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order, the process frame body (8) and the development device (5) each having attachment/detachment order controlling means for preventing the process frame body (8) and the development device (5) from being attached and detached in an order different from the predetermined order.

Regarding claims 3-5, the attachment/detachment order controlling means (8a, 54, 8b, 1c) is built as an engagement portion, for example positioning hole (8a) on the process frame body (8) as a concavity which is brought into engagement state in association with attachment operation of the component to be attached subsequently, the engagement portion, for example positioning boss (54) of the developing device (5) as a convexity, and is brought into disengagement state in association with detachment operation of the component to be detached first. The positioning boss (54) and hole (8a) are created by forming part of each of the process frame body and the development device into a certain shape.

Regarding claim 6, first the process frame body (8) is attached and then the development device (5) is attached, and the attachment/detachment order controlling means of the process frame body is formed of a guide portion for guiding the attachment of the development device, whereas the attachment/detachment order controlling means of the development device (5) is formed of a to-be-guided portion which is guided by the guide portion. See col. 4, lines 1-21.

Regarding claim 9, the development device further comprises pressure-contact means, as shown in figure 2b, for contacting under pressure, when the process frame body (8) and the development device (5) are attached.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishiguro et al. (US 6,853,821)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Ishiguro et al. disclose an image forming apparatus including an image forming apparatus main body; a process frame body (5) including at least a photoconductive body (4), image forming means for forming an electrostatic latent image on a surface of the photoconductive body (col. 3, lines 48-56), and a frame main body for holding the photoconductive body (4) and the image forming means. A development device (6) including at least development means for developing the electrostatic latent image using toner, toner supply means (3) for feeding toner to the development means, and a development device main body for holding the development means and the toner supply means, as shown in figure 4.

Figures 6(a)-(d) illustrate an attachment/detachment order controlling means for preventing the process frame body and the development device from being attached and detached in an order different from the predetermined order.

Regarding claim 3, figure 6(b) shows that the attachment/detachment order controlling means is created by forming part of each of the process frame body and the development device into a certain shape.

Regarding claims 4-6, figures 6(a)-(d) show the attachment/detachment order controlling means is built as an engagement portion which is, in the attachment of the process frame body and the development device, brought into engagement state in association with attachment operation of the component to be attached subsequently, and is, in the detachment of the process frame body and the development device, brought into disengagement state in association with detachment operation of the component to be detached first, and the engagement portions are formed of a convexity and a concavity.

Regarding claim 6, figure 6 shows the order of attachment of the process frame body and development device is such that first the process frame body is attached and then the development device is attached.

Regarding claim 7, the process frame body (5) further comprises frame securing means, lever (13), which is, in attachment operation, fitted to a certain portion of the apparatus main body to secure the process frame body, and releases, in detachment operation, the fitting to the certain portion by user's operation, and wherein, in cases where the order in which the process frame body and the development device are detached is that first comes the development device, then the process frame body, as shown by figure 7. The attachment/detachment order controlling means of the development device has an inhibitory portion for inhibiting operation of the frame securing means (13) by users, as shown in figure 11, when the process frame body and the development device are attached.

Regarding claim 8, figure 11 shows the inhibitory portion partially covering the frame securing means (13), and referring to figure 10, the inhibitory portion release the frame securing means (13) in association with the detachment operation.

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Regarding claim 9, the development device further comprises pressure-contact means for contacting under pressure or separating the photoconductive body and the development means by user's operation, when the process frame body and the development device are attached. See col. 10, lines 11-24.

Regarding claim 10, the toner supply means (3) is made attachable to and detachable from the development device main body (5), as shown in figure 4, and wherein the pressure-contact means acts to contact under pressure or separate the photoconductive body and the development means in accordance with the attachment and detachment of the toner supply means to and from the development device. See col. 10, lines 45-51.

Related Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaneshige (US 4,821, 063) and Katoh et al. (US 5,697,008) disclose a image forming apparatus with modules detachably mounted such that the second module cannot be mounted until the first module is mounted.

Tanizaki et al. (US 6,785,492) disclose a color imager forming apparatus in which the developing units are placed in the apparatus and then the photoconductor units are placed in the apparatus.

Carter et al. (US 6,678,489) disclose a two part cartridge in which the developer part is placed in the apparatus before the photoconductor part.

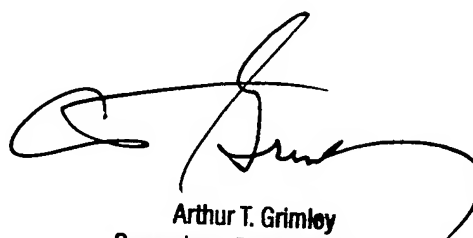
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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